UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,199	03/26/2004	Bruce E. Edwards	BP 3195	8646

			EXAMINER
34399	7590	07/05/2006	JACKSON, BLANE J

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ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

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<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/810,199</td><td>Applicant(s)
EDWARDS ET AL.</td></tr>
<tr><td>Examiner
Blane J. Jackson</td><td>Art Unit
2618</td></tr>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 May 2006</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10,12,14-23 and 25</u> is/are rejected.

7)☒ Claim(s) <u>11,13,24 and 26</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The applicant's amendment to claims 12 and 25 resolves the USC 112 issue as pointed out in the previous Office Action and is accepted.

Response to Arguments

Applicant's arguments filed 22 May 2006 have been fully considered but they are not persuasive. The applicant argues that Shohara does not teach a system that is operable to calibrate the frequency of a low power oscillator while the system is operating during sleep mode, during the second power mode. However, Shohara discusses at length an invention that utilizes a low power low frequency sleep oscillator during sleep mode to save on power consumption *where accurate system time is maintained continuously during sleep mode* to an error less than a sleep clock cycle as made possible by calibration of sleep mode increment counter due to changes in temperature in the environment. This enables precise scheduling of power on intervals spanning both active and sleep mode, column 8, line 19 to column 9, line 9 and generally stated: column 4, lines 1-3. Shohara teaches prior art Kivari cannot compensate for sleep oscillator timing error accumulated during the sleep mode until the beginning of the active mode, column 3, lines 38-56.

This opinion is repeated in the Final Rejection that follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by

Shohara et al. (US 6,473,607).

As to **claims 1 and 14**, Shohara teaches a wireless communication system and

method of managing power comprising:

A radio module operable to communicate data between a host and at least one

external device (figure 1, receiver (26), cellular telephone or paging network, column 11,

lines 9-33),

At least one digital module operable to process data communicated by the radio

module (timer (70), controller and user data device (34) include digital processing

components all clocked by the reference oscillator (90), column 12, lines 3-9),

A clock generator for generating first and second clock signals for use by the

digital module (combination of a high speed reference clock (92) provided by the

reference oscillator (90) and a low speed second reference clock (98) provided by the

sleep oscillator (96)),

Power management logic operable to:

control said clock generator to cause the clock generator to generate the first

clock signal when the wireless communication system is operating in a first power mode

and to generate the second clock signal when the wireless communication system is operating in a second power mode (figure 1, a power controller (42) for controlling power supplied to components of the communications device in response to real-time commands from a timer (70) or command from device operations controller (50), device components including a reference oscillator (90) powered on in the active mode, off for the sleep mode and a sleep oscillator (96) power on during the sleep mode, off during the active mode, column 11, line 55 to column 12, line 64),

Calibrate the frequency of said clock generator while said wireless communication system is operating in said second power mode (column 8, lines 19-37, accurate system time is maintained continuously during sleep mode by calibration of a sleep mode increment counter due to changing temperature).

As to **claims 2 and 15** with respect to claims 1 and 14, Shohara teaches the radio module is turned on when the wireless communication system is operating in the first power mode (receiver (26) is selected on in the first or active power mode, column 12, lines 32-47).

As to **claims 3 and 4** with respect to claim 2 and **claims 16 and 17** with respect to claim 15, Shohara teaches the fist clock signal is a high-speed clock generated by the clock generator, a crystal and a phase locked loop, when the radio module is turned on (reference oscillator (90) provides the reference clock (92), column 11, line 60 to column 12, line 18).

As to **claim 5 and 18** with respect to claims 1 and 17, Shohara teaches the radio module is turned off when the communication system is operating in the second power mode (sleep mode, column 12, lines 50-57).

As to claims **6 and 7** with respect to claim 5 and **claims 19 and 20** with respect to claim 17, Shohara teaches the second clock signal is a lower frequency clock that is generated by the clock generator, a low-power oscillator, when the radio is turned off (sleep oscillator (96) provides the second reference clock (98), column 12, lines 19-56).

As to **claims 8 and 21** with respect to claims 1 and 14, Shohara teaches a timer operable to count clock cycles of the first and second clock signals (figure 2, timer (70) comprising reference counter (74) to count the cycles of the reference clock (72) during the active mode and sleep counter (88) to count the low frequency clock (86) during the sleep mode, column 12, line 66 to column 13, line 60).

As to **claims 9 and 22** with respect to claims 8 and 21, Shohara teaches a timer management module operable to maintain a cumulative count of the number of clock cycles counted by the timer during a predetermined time interval (figure 2, mode control logic (60) selects the reference counter in the active mode and the sleep counter (88) in the sleep mode, column 6, lines 30-40 and column 13, lines 61-67).

As to claims **10 and 23** with respect to claims 9 and 22, Shohara teaches the timer is operable to count the number of clock cycles for the first clock when the wireless communication system is operating in the first power mode and is further operable to count the number clock cycle for the second clock signal when the wireless communication system is operating in the second power mode (frame counter (80) counts input frame epochs generated by either the reference or sleep counter to maintain continuity of count through changes in the selected mode, column 6, lines 30-46).

As to **claims 12 and 25** with respect to claims 9 and 22, Shohara teaches said timer is operable to count the number of clock cycles for said first clock when said wireless communication system is operating in said first power mode and said timer does not count the number of clock cycles for said first clock signal when said wireless communication system is operating in said second power mode (column 13, line 61 to column 14, line 25, timer (70), from counter input is switched between the r4eference counter output and the sleep counter output, the reference counter is disabled and supporting reference oscillator is powered down by the event scheduler during sleep mode).

Allowable Subject Matter

Claims 11, 13, 24 and 26 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

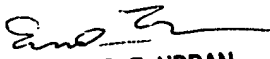examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-

7890. The examiner can normally be reached on Monday through Friday, 9:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJJ

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